

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

ABB AB
LEGAL COMPLIANCE/
INTELLECTUAL PROPERTY
721 78 VÄSTERÅS

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)

17-03-2005

Applicant's or agent's file reference

9594WO/AT/MZ

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/SE 2004/001931

International filing date (day/month/year)

17-12-2004

Priority date (day/month/year)

22-12-2003

International Patent Classification (IPC) or both national classification and IPC

G01S 5/14, G06F 17/30, G06F 17/60

Applicant

ABB RESEARCH LTD.et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

965-10-22

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language, _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amine acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2-19, 22, 24-27, 29, 31-35	YES
	Claims	1, 20, 21, 23, 28, 30, 36-40	NO
Inventive step (IS)	Claims		YES
	Claims	1-40	NO
Industrial applicability (IA)	Claims	1-40	YES
	Claims		NO

2. Citations and explanations:

Reference is made to the following documents:

D1: GB 2371884 A
D2: WO 0201484 A1
D3: US 20030061159 A1
D4: WO 9635196 A1
D5: US 4920488 A

The invention concerns a method and a device for recording the position of a component in a location system of a control system of an industrial facility for an industrial process. The object of the invention is to simplify the input of data.

D1 discloses a location system of a control system of an industrial facility for an industrial process comprising a model of the facility. Data is input manually.

D2 discloses a system comprising a geographic database which can be used for different applications, e.g. street sign inventory. The positions of the street signs are displayed on a map on a graphics display of a portable computer. The traffic signs are identified by a bar code reader and the position of the portable computer is determined by a GPS receiver. Data communication signals 238, 240 are used for transferring the identification information and position information to the computer. Related identification and position information is stored in a geographical information database (see page 3, lines 19-32 and page 13, line 6- page

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawing or on the question whether the claim are fully supported by the description, are made:

Independent claims 28, 30, 36, 37, 38, 39 and 40 fails to comply with the clarity and conciseness requirements of PCT Article 6. In claims 28 and 30 it is not clear how the parts are connected and cooperate. Claims 36, 37 and 38, although formally connected to a method claim, do not include the essential features that are necessary to carry out the method. Claims 39 and 40 relating to a signal comprising information do not include any technical features characterizing the signal. Furthermore, claim 40 relating to a signal comprising identification information does not give a technical solution to the problem of recording the position.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: BOX V

14, line 17).

Documents D3-D5 disclose similar systems for updating a geographical database using a portable computer and GPS positioning.

Document D1 is considered to represent the closest prior art. The invention according to independent claims 1, 20, 21, 28, 36, 37, 38, 39 and 40 differs from the system in D1 in that a mobile information processing device and a positioning device is placed adjacent the component. The invention according to independent claims 23 and 30 differs from the system in D1 only in the input of position data into a conventional computer.

Due to these features a simpler data input is achieved. Consequently, with the background of D1, the problem is to design a method and a device which achieves a simplified positioning data input. A solution to this problem is known from document D2, which describes a system for storing related identification and position information of an object in a database using a portable computer and GPS positioning. In D2 the street sign inventory application is merely illustrative and other applications are suggested.

Thus, the person skilled in the art, having the device known from D1 as a starting point, aiming to solve the identified problem, would with the knowledge of D2 modify the system of D1, and thus arrive at the invention according to independent claims 1, 20, 21, 23, 28, 30, 36, 37, 38, 39 and 40. Since D1 and D2 both relate to the same technical field and no unexpected effect is obtained, the combination of what is known from D1 and D2 is considered obvious for a person skilled in the art. Therefore, the subject-matter defined in independent claims 1, 20, 21, 23, 28, 30, 36, 37, 38, 39 and 40 does not involve an inventive step.

Also the subject-matter defined in dependent claims 2, 3, 6-9, 11, 13, 16, 18, 22, 24-27, and 29 is disclosed in D2. The remaining claims are considered to involve particular detail

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In case the space in any of the preceding boxes is not sufficient.
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executions which are known from the cited documents D1-D5 or are obvious to a person skilled in the art. Therefore, the invention according to claims 2-19, 22, 24-27, 29 and 31-35 is not considered to involve an inventive step.